Abstract of the Disclosure

A detector for scanning electron microscopes, which can be used under different pressure conditions in the specimen chamber of the electron microscope, designed for the detection of both electrons and light. For this purpose, the detector has a photodetector and a scintillator of a material transmissive for visible light connected before the photodetector. The scintillator can be provided with a coating transparent to visible light. By the application of different potentials, the detector is suitable for the detection of electrons in high vacuum and for the detection of light with high pressures in the specimen chamber.